

A4
patient's central longitudinal axis 102 of the distal femur 95 is shown rotating in the direction of arrow 101. In the flexed position shown, the horizontal bar cam 54 of femoral component 50 registers against the posterior surface 77 of central post 74 of polymeric insert 70. In this position, the central post 74 causes femoral roll back on the tibia articular insert 70. The posterior aspect of the tibia articular surface at 77 provides a lift that is created by generally following the curvature of the femoral component 50 in extension. This will provide a high degree of surface contact, conformity, subsequently providing low contact stress, in extension, where most of gait occurs. The post 74 can have a square or rectangular base that fits snugly with the central opening 57 of the femoral component 50.

In the Claims

Please replace the pending claims in the application with the following claims of the same number:

Sub B17
A5
1. (once amended) A posterior stabilized knee prosthetic system comprising:

a) a femoral component configured to be surgically implanted into a patient's femur, the femoral component having two condylar portions with a cam extending between the posterior end of the condylar portions, and the cam having a diffusion-hardened surface along a portion of the cam for adding strength and wear resistance to the contact zones of the cam;

b) a tibial component configured to be surgically implanted into a patient's tibia; and

c) a tibial insert having a proximal surface that is shaped to articulate against the femoral component, the insert having a distal surface that fits against the proximal surface of the tibial component, and the tibial insert having a post for engaging the femoral component to provide posterior stabilization.

Sub B17
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5. (once amended) The prosthetic system of claim 4, wherein the thickness of the zirconium oxide of the load bearing surface is greater than the thickness of the thickness of the zirconium oxide of the cam.

A7
Sub B
10. (once amended) A prosthesis for implantation in a patient, comprising:

a prosthesis body for implantation in the body of the patient, the prosthesis body having one or more load bearing surfaces and one or more non-load bearing surfaces,

the load bearing surface on the prosthesis body being sized and shaped to engage or cooperate with a second load bearing surface on another prosthesis portion, said second load bearing surface being formed of an organic polymer or polymer-based composite,

the non-load bearing surface on the prosthesis body being sized and shaped to engage or cooperate with a second non-load bearing surface on another prosthesis portion, said second non-load bearing surface being formed of an organic polymer or polymer-based composite,

a diffusion-hardened coated surface on the bearing surface, and

a diffusion-hardened coated surface on the non-load bearing surface.

13. (once amended) The prosthesis of claim 12, wherein the thickness of the coating of the diffusion-hardened surface of the load bearing surface is greater than the coating of the diffusion-hardened surface of the non-load bearing surface.